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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/557,600	04/25/2000	Yonggang Du	PHD 99,056	8246

24737 7590 07/15/2003

PHILIPS INTELLECTUAL PROPERTY & STANDARDS  
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BRIARCLIFF MANOR, NY 10510

EXAMINER

MILLS, DONALD L

ART UNIT	PAPER NUMBER
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2662

DATE MAILED: 07/15/2003

5

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/557,600

Applicant(s)

DU, YONGGANG

Examiner

Donald L Mills

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 4/25/00
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 April 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☒ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign mentioned in the description: “23” (See page 2, line 33.) A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### ***Specification***

2. The abstract of the disclosure is objected to because on page 9, line 11 “Fig. 1” is referenced without explanation. Correction is required. See MPEP § 608.01(b).

3. The disclosure is objected to because of the following informalities:

Proper headings including Background of the Invention, Brief Summary of the Invention, Brief Description of the Drawings, and Detailed Description of the Invention have been omitted.

Page 1, lines 15-20 improper carriage returns are utilized causing poor formatting.

Proper paragraph structure is required.

Page 2, lines 11-27 references specific claim numbers, such as, claims 2-9. Due to the variability of claim numbers they should not be referenced in the specification.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

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4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 1-10, the claims specify a *network node designed for wireless communications* (For example, see claim 1, line 2,) however it is unclear as to which node in the network is actually being referenced. Further clarification is necessary. For the purpose of this examination, the examiner will interpret *a network node* as a wireless network node.

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 4, 9, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Siu et al. (US 6,552,641 B1), hereinafter referred to as Siu, in view of Naden et al. (US 6,560,206 B1), hereinafter referred to as Naden.

Regarding claim 1, 4, 9, and 10, Siu discloses *a network with several network clusters of at least one wireless network node* (Referring to Figure 3, a network with a plurality of subscribers and base stations. See column 4, lines 58-63,) *which is designed for the wireless transmission of packets in time slots of given length in a time multiplex process* (The wireless

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network is designed for the transmission of packets utilizing time division multiple access which inherently includes the use of time slots. See column 3, lines 6-8.) Where the *variable length of each packet is at least smaller than the fixed time slot* (Referring to Figure 1, the disclosed network includes a telephony, ATM, IP, and frame relay network which inherently includes packets, such as, null cells that are smaller in length than the fixed time slot.) These packets are *transmitted to all wireless nodes authorized for data transmission via a point-to-multipoint link* (Signaling between base stations is achieved by a point-to-multipoint system. See column 5, lines 15-25.) Sui further discloses *a wireless network node which acts as a central node designed to control the radio traffic* (Referring to Figure 5, the base station consists of digital and microwave equipment designed to route traffic over the radio interface. See column 5, lines 37-40.) Siu fails to teach *a wireless network node that combines several packets into a superpacket.*

Naden teaches a more reliable method for transmitting and receiving data packets over a communications link such as a wireless link (See column 3, lines 21-23,) by grouping ATM cells together to form multi-cell frames (Referring to Figure 3, see column 7, lines 58-60.)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the multi-cell grouping method of Naden in the base station of Siu. One of ordinary skill in the art at the time the invention was made would have been motivated to do so in order to provide a more reliable and efficient point-to-multipoint wireless network, as suggested by Nadden in column 5, lines 60-62.

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8. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Siu et al. (US 6,552,641 B1), hereinafter referred to as Siu, in view of Naden et al. (US 6,560,206 B1) and further in view of Pasternak et al. (US 5,936,949), hereinafter referred to as Pasternak.

Regarding claims 5 and 6, the limitations of parent claim1 have been addressed above. Siu further teaches *a wireless network node which receives packets* (A base station provides wireless access to a subscriber, which inherently uses packets to communicate. See column 1, lines 56-67.) Siu fails to teach a wireless network node that *compares the address identification in the control field of the packet with an address in the network cluster to identify the destination address and contains a table to store all the addresses of the network cluster.*

Pasternak teaches checking the overhead address field to determine whether the received cell should be utilized (See column 13, lines 52-54,) and maintaining a connection table for virtual circuits (See column 14, lines 39-40.) Pasternak further teaches that delegating as many functions as possible to the base station, in a point-to-multipoint system, is favorable because it eliminates the need to replicate the same function in all terminals in a network (See column 1, lines 63-67.)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the address resolution and connection table of Pasternak in the base station of Siu. One of ordinary skill in the art at the time the invention was made would have been motivated to do so in order to centralize the transfer of data.

9. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Siu et al. (US 6,552,641 B1) hereinafter referred to as Siu in view of Naden et al. (US 6,560,206 B1) in further view of Freeburg et al. (US 5,940,381) hereinafter referred to as Freeburg.

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Regarding claims 7 and 8, the limitations of parent claim 1 have been addressed above. Sui further discloses a service for authentication/encryption key management (See column 6, lines 24-26.) Sui fails to teach *a management system for certain applications that provides the establishment of point-to-point only connections instead of point-to-multipoint connections (Claim 7) and sending a key via point-to-multipoint and coded data via point-to-point connection in a wireless network node (Claim 8).*

Freeburg teaches a method of traffic management depending on the flow of data that utilizes a unidirectional point-to-point connection for an upstream connection and a unidirectional point-to-multipoint connection for a downstream connection in a base station to minimize processing (See column 5, lines 26-37.)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the traffic management system of Freeburg in the base station of Siu. One of ordinary skill in the art at the time the invention was made would have been motivated to do so in order to minimize data processing.

#### ***Allowable Subject Matter***

10. Claims 2 and 3 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Conclusion***

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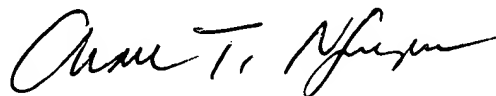
11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donald L Mills whose telephone number is 703-305-7869. The examiner can normally be reached on 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on 703-305-4744. The fax phone numbers for the organization where this application or proceeding is assigned is 703-872-9314 for regular and After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4700.

Donald L Mills

July 11, 2003



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